

What is claimed is:

1. A diecasting machine comprising:

an injection cylinder for loading molten metal into a mold cavity by injection;

a single two-way hydraulic pump driven by a driving motor for supplying hydraulic fluid to the injection cylinder in two directions;

a hydraulic circuit for driving the injection cylinder by controlling supply of hydraulic fluid from the two-way hydraulic pump to the injection cylinder and discharge of hydraulic fluid from the injection cylinder which proceeds in accordance with movement of a piston of the injection cylinder; and

a hydraulic controller for controlling rotational speed of the driving motor associated with the two-way hydraulic pump in injection/loading the molten metal and controlling torque of the driving motor in dwelling.

2. A diecasting machine comprising:

an injection cylinder for loading molten metal into a mold cavity by injection;

a plurality of two-way hydraulic pumps connected in parallel with each other and driven by respective driving motors for supplying hydraulic fluid to the injection cylinder in two directions;

a hydraulic circuit for driving the injection cylinder by controlling supply of hydraulic fluid from the two-way hydraulic pumps to the injection cylinder and discharge of hydraulic fluid from

the injection cylinder which proceeds in accordance with movement of a piston of the injection cylinder; and

a hydraulic controller for actuating one of the two-way hydraulic pumps which is larger in capacity or both of the two-way hydraulic pumps in injection/loading the molten metal and actuating any one of the two-way hydraulic pumps or one of the two-way hydraulic pumps which is smaller in capacity in dwelling.

3. The diecasting machine according to claim 2, wherein the two two-way hydraulic pumps are generally equal in capacity.

4. The diecasting machine according to claim 2, wherein one of the two-way hydraulic pumps which is driven in injection/loading the molten metal is larger in capacity than the other two-way hydraulic pump which is not driven in injection/loading the molten metal.

5. The diecasting machine according to claim 1, wherein the hydraulic controller is operative to control a discharge rate of the two-way hydraulic pump based on hydraulic pressure information from a hydraulic fluid pipeline situated on a side toward which the piston is protruding.

6. The diecasting machine according to claim 2, wherein the hydraulic controller is operative to control a discharge rate of each of the two-way hydraulic pumps based on hydraulic pressure information

from a hydraulic fluid pipeline situated on a side toward which the piston is protruding.

7. The diecasting machine according to claim 1, wherein the driving motor associated with the two-way hydraulic pump is a servomotor.

8. The diecasting machine according to claim 2, wherein the driving motors associated with the respective two-way hydraulic pumps are each a servomotor.